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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Alexei Lebedev

Algo-1

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10/11/2011

STRAUB & POKOTYLO

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EXAMINER

HARRISON, CHANTE E

ART UNIT

PAPER NUMBER

2628

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/644,904	Applicant(s) LEBEDEV, ALEXEI	
	Examiner CHANTE HARRISON	Art Unit 2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 16-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 16-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to communications: Amendment, filed on 7/21/11. This action is made FINAL.
2. Claims 1-7 and 16-24 are pending in the case. Claims 1 and 16 are independent claims. Claims 1-7 and 9-14 have been amended. Claims 8-15 are canceled.

Response to Arguments

1. Applicant's arguments filed 7/21/11 have been fully considered but they are not persuasive.
2. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Therefore, the rejection in view of Friesen and further in view of Keith is maintained.
3. Applicant additionally argues claim 16 is patentable based on claim elements similar to amended claim elements of claim 1.
4. In response, the rationale as provided in the following rejection applies herein.

Specification

1. The amendment filed 7/21/11 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the last paragraph of pg. 6.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
6. Claim 6 recites the limitation "said special graphical mark" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richard Friesen et al., US 7,212,999 B2, 5/2007 and further in view of Keith Christopher, US 2007/0005488.

As per independent claim 1, Friesen discloses

Presenting an order book on a real-time graphical display (abstract), said step of presenting the order book including:

a display canvas (Fig. 3A) which displays time on the X axis (Fig. 3B; col. 9, ll. 15-20) and price on the Y axis (Fig. 3A "332")

displaying a variety of scales, both in price and in time direction (Fig. 3C)

displaying orders and trades as distinguished graphical marks (Fig. 3A "300, 304");

providing visual attributes to each of said graphical marks, said visual attributes

including at least one attribute from the group of attributes consisting of: i) line

thickness, ii) color and iii) shape, the visual attributes applied to an individual graphical mark (col. 8, ll. 10-15) being based on at least one of i) order intention (col. 8, ll. 15-25),

ii) order age, iii) order size (col. 6, ll. 26-33) and iv) trade volume, corresponding to the individual graphical mark for which the visual attributes are being provided;

trader clicking in a special auto-route band (col. 11, ll. 15-20; col. 10, ll. 50-55).

Friesen fails to disclose providing a trader an opportunity to enter orders that will be automatically routed to a market center of a computer's choice by said trader clicking in a special auto-route band and having the computer choose a destination that has the fastest response time and the best price, which Keith discloses (Para 62, 64, 70; Fig. 11, 13).

Friesen teaches an interface for allowing real time trades.

Keith teaches providing an electronic program that acts as a virtual agent to automatically route orders to markets based on user specifications for the order.

It would have been obvious to one of skill in the art to include Keith's automatically routed orders by having the computer choose a destination that has the fastest response time and the best price with the method of Friesen because each teaches routing electronic trades and tracking orders, where the combination of known elements provides predictable results.

As per dependent claim 2, Friesen discloses (a) providing a graphical mark on said display which said trader can manipulate to adjust intended price along said Y axis and over said X axis to adjust intended time of placement (col. 8, ll. 38-44)

(b) providing said graphical display to show said trader's own active and recent orders and trades being displayed alongside other participants' orders in a manner that distinguishes said trader's active orders and trades from the other participants in a market whereby said trader can make visual comparison (col. 5, ll. 49-65; col. 8, ll. 1-5,

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14-20).

As per dependent claim 3, Friesen discloses said graphical display visualizes order books of multiple different markets, the order book of an individual market being shown as a vertical, multiple vertical bands corresponding to the different markets being shown on one side of said real-time graphical display (col. 6, ll. 1-2; Fig. 3A “300, 304”; col. 9, ll. 2-4; col. 10, ll. 1-4).

As per dependent claim 4, Friesen discloses each said vertical band displays orders originating from a single market (i.e. each band displays an order or stacked order corresponding to the same market commodity) (col. 6, ll. 1-2; Fig. 3A “300, 304”; col. 10, ll. 1-4).

As per dependent claim 5, Friesen discloses wherein the price of said orders are indicated on said Y coordinate with distinguished graphical mark (Fig. 3A “336”; col. 6, ll. 10-11).

As per dependent claim 6, Friesen discloses providing said trader with an opportunity to route orders to a specific market center by moving a graphical mark inside a vertical band corresponding to said specific market center and to adjust limit price by a vertical movement of said special graphical mark (i.e. stacking the orders) (col. 8, ll. 38-44; col.

11, ll. 15-20; col. 10, ll. 50-55).

As per dependent claim 7, Friesen discloses said trader can send, cancel and re-send said order to the specific market center by predetermined user action whenever price, size or another parameter of said order has changed (col. 8, ll. 52-64).

3. Claims 16-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richard Friesen et al., US 7,212,999 B2, 5/2007.

As per independent claim 16, Friesen discloses

Presenting trading information including an order book on a real-time graphical display (abstract), said step of presenting the order book including:

displaying on a display canvas (Fig. 3A) time on an X axis (Fig. 3B; col. 9, ll. 15-20) and price on a Y axis (Fig. 3A "332")

displaying a variety of scales including multiple price and in time scales (Fig. 3C);

displaying sell offers, buy offers (Fig. 3A "300, 304") and trades (Fig. 3A "316") using distinguished graphical marks ("300,304,316"), sell offers and buy offers being

displayed as lines (Fig. 3A "300, 304"), the line attribute of a line corresponding to a sell order being a function of the size of the order to which the line corresponds (i.e. order quantity is represented by icon size, where the icon is a line indicating the order) (col. 6, ll. 25-30);

providing visual attributes to of said graphical marks, said visual attributes including at

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least one attribute from the group of attributes consisting of: i) line thickness, ii) color and iii) shape, the visual attributes applied to an individual graphical mark (col. 8, ll. 10-15) being based on at least one of i) order intention (col. 8, ll. 15-25), ii) order age, iii) order size (col. 6, ll. 26-33) and iv) trade volume, corresponding to the individual graphical mark for which the visual attributes are being provided; and providing a user the opportunity to buy a security by moving an element displayed on the graphical display (i.e. position a graphical mark, e.g. icon 300 or 304, at a desired position on the display to place an order to buy a security) (col. 8, ll. 25-51).

Friesen fails to disclose line thickness as a function of the size of the order.

However, it would have been obvious to one of skill in the art to include line thickness as a function of the order size with the method of Friesen because Friesen teaches varying the size of the line to indicate the size of the order, where thickness is a visual attribute relative to the line size. One of skill in the art would have been motivated to include line thickness as a function of the order size with the method of Friesen for the benefit of applying additional varying visual attributes of the line to indicate order size.

Claim 17, Friesen discloses wherein providing a user the opportunity to buy a security by moving an element displayed on the graphical display includes: providing the user the opportunity to drag a buy bar upward to buy a security (i.e. dragging the icon, e.g. 300 or 304, upward on the display changes causes a corresponding movement of

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the price bar "336", which indicates the price at which the security is to be bought) (Fig. 3A; col. 8, ll. 25-51).

Claim 18, Friesen discloses displaying a sell bar which the user can drag downward to sell a security (i.e. dragging the icon, e.g. 300 or 304, downward on the display changes causes a corresponding movement of the price bar "336", which indicates the price at which the security is to be sold) (Fig. 3A; col. 8, ll. 25-51).

Claim 19, Friesen discloses displaying the volume of shares traded as blocks displayed on the bottom of the screen along the horizontal axis (Fig. 3A "340"; col. 9, ll. 24-29).

As per dependent claim 20, Friesen discloses (a) providing a graphical mark on said display which said trader can manipulate to adjust intended price along said Y axis and over said X axis to adjust intended time of placement (col. 8, ll. 38-44)

(b) providing said graphical display to show said trader's own active and recent orders and trades being displayed alongside other participants' orders in a manner that distinguishes said trader's active orders and trades from the other participants in a market whereby said trader can make visual comparison (col. 5, ll. 49-65; col. 8, ll. 1-5, 14-20).

As per dependent claim 21, Friesen discloses said graphical display visualizes order

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books of multiple markets as vertical bands (col. 6, ll. 1-2; Fig. 3A “300, 304”; col. 10, ll. 1-4).

As per dependent claim 22, Friesen discloses each said vertical band displays orders originating from a single that market (i.e. each band displays an order or stacked order corresponding to the same market commodity) (col. 6, ll. 1-2; Fig. 3A “300, 304”; col. 10, ll. 1-4).

As per dependent claim 23, Friesen discloses wherein the price of said orders are indicated on said Y axis with distinguished graphical marks (Fig. 3A “336”; col. 6, ll. 10-11).

As per dependent claim 24, Friesen discloses providing said trader with an opportunity to route orders to a specific market center by moving a special graphical mark inside a vertical band corresponding to said specific market center and to adjust limit price by a vertical movement of said special graphical mark (i.e. stacking the orders) (col. 8, ll. 38-44; col. 11, ll. 15-20; col. 10, ll. 50-55).

Conclusion

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHANTE HARRISON whose telephone number is (571)272-7659. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Wang can be reached on 571-272-0811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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